## UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

HACHETTE BOOK GROUP, INC., HARPERCOLLINS PUBLISHERS LLC, JOHN WILEY & SONS, INC., and PENGUIN RANDOM HOUSE LLC,

Plaintiffs

v.

CASE NO. 1:20-cv-04160

INTERNET ARCHIVE and DOES 1 through 5, inclusive,

Defendants

# EXPERT REPORT OF RASMUS JØRGENSEN, PH.D.

February 25, 2022

HIGHLY CONFIDENTIAL ATTORNEYS' EYES ONLY

## **CONTENTS**

I. I	INTRODUCTION	2
A.	QUALIFICATIONS AND EXPERIENCE	2
B.	Assignment	2
C.	MATERIALS CONSIDERED	3
D.	INDEPENDENCE AND COMPENSATION DISCLOSURE	4
II. S	SUMMARY OF OPINIONS	4
III. I	BACKGROUND	5
A.	THE PARTIES	5
1.	. PLAINTIFFS	5
2.	. Defendant	6
B.	CONSUMER DEMAND FOR BOOKS VARY BY PRODUCT ATTRIBUTES	6
C.	PUBLISHERS SELL BOOKS THROUGH DISTINCT DISTRIBUTION CHANNELS	8
D.	EBOOK LENDING THROUGH OVERDRIVE	9
E.	THE INTERNET ARCHIVE'S DIGITAL LENDING LIBRARY	12
1.	THE DIGITAL LENDING LIBRARY AND CONTROLLED DIGITAL LENDING	12
2.	. THE NATIONAL EMERGENCY LIBRARY	13
	THE INTERNET ARCHIVE LENT OUT A SMALL VOLUME OF THE WORKS-IN-SUIT RELATIVE TO OTHER DIGITAL LIBRARIES	14
	THE PEAK NUMBER OF INTERNET ARCHIVE LOANS TAKEN OUT DURING THE NATIONAL EMERGENCY LIBRARY	16
]	THE EVIDENCE IS NOT CONSISTENT WITH PLAINTIFFS' PURPORTED THEORY THAT INTERNET ARCHIVE'S BOOK LOANS ARE SUBSTITUTES FOR LOANS OF THE WORKS IN-SUIT FROM OTHER DIGITAL LIBRARIES	-
VII. I	THE EVIDENCE IS NOT CONSISTENT WITH PLAINTIFFS' PURPORTED THEORY THAT INTERNET ARCHIVE'S BOOK LOANS ARE SUBSTITUTES FOR PLAINTIFFS' PAPERBAC AND EBOOK SALES OF THE WORKS-IN-SUIT	Г СК

## I. Introduction

### A. Qualifications and Experience

1. I am an economist and Senior Consultant at NERA Economic Consulting ("NERA"). NERA is a global firm of economists dedicated to applying economic, finance, and quantitative principles to complex business and legal issues. I obtained my BSc, MSc, and PhD in Economics from University of Copenhagen. Prior to joining NERA, I was a Postdoctoral Research Fellow at Yale University and Professor of Economics at University of Copenhagen, where I taught undergraduate and graduate courses in econometric analysis and international economics. My research has appeared in leading peer-reviewed scientific journals, including the *American Economic Review*, and I have served as a peer reviewer for a dozen of the principal scientific journals in Economics. At NERA, my practice focuses on the economics of intellectual property, antitrust economics, and calculating economic damages in commercial disputes. My CV, which includes a list of my past publications, is attached as **Exhibit 1** to this report. I have not testified as an expert in any other litigation.

## B. Assignment

- 2. Hachette Book Group, Inc. ("Hachette"), HarperCollins Publishers LLC ("HarperCollins"), John Wiley & Sons ("Wiley"), and Penguin Random House LLC ("Penguin Random House") (collectively, "Plaintiffs") allege that the Internet Archive ("IA" or "Defendant") has infringed their copyrights by scanning, reproducing, and distributing digital copies of in-copyright print books through its digital lending library. The suit brought by Plaintiffs against IA is based on a list of in-copyright works that IA allegedly infringed through its digital lending library. This list includes a total of 127 book titles ("Works-in-Suit").
- 3. I was asked by Durie Tangri LLP ("counsel"), counsel for Defendant, to provide an independent opinion to assist the Court regarding matters on which expert assistance may be required in this litigation. Specifically, I have been asked to offer opinions on the following four

<sup>&</sup>lt;sup>1</sup> Complaint, *Hachette Book Group, Inc., HarperCollins Publishers LLC, John Wiley & Sons, Inc.,* and *Penguin Random House LLC, v. Internet Archive* and *DOES 1 through 5*, United States District Court, Southern District of New York, Case No: 1:20-cv-04160, June 1, 2020 ("Complaint"), ¶¶ 2-3, 6, 75, 114-115.

<sup>&</sup>lt;sup>2</sup> Complaint,  $\P$  3, 20.

<sup>&</sup>lt;sup>3</sup> Complaint, Exhibit A.

topics: i) the amount of Internet Archive's digital lending of the Works-in-Suit relative to other digital libraries over time; ii) the peak monthly loan totals for each of the Works-in-Suit during the period in which the National Emergency Library was in operation; iii) the impact of the Internet Archive's use of the Works-in-Suit on the actual digital lending market based on available information from the Internet Archive and OverDrive; and iv) the impact of the Internet Archive's use of the Works-in-Suit on Plaintiffs' sales across book formats. I understand from counsel for Defendant that courts have historically considered several of these topics when making a fair use determination in the context of copyright infringement disputes.

#### C. Materials Considered

- 4. The opinions in this report are based on my professional training and experience, as well as my review of the Complaint, publicly available documents, discovery materials (including deposition transcripts and exhibits),<sup>4</sup> and data and documents that are in the evidentiary record. A complete list of the information and materials that I relied on when preparing this report is attached as **Exhibit 2**. The specific information upon which I have relied is cited in the footnotes of the report.
- 5. My work in this matter is ongoing, and I reserve the right to supplement my opinions and analysis should any additional information become available to me. I also intend to review any additional information or reports that may be submitted by Plaintiffs and their expert(s). I understand that the Scheduling Order in this case permits the Internet Archive to serve a Reply report, and I reserve the right to prepare such a report.

<sup>&</sup>lt;sup>4</sup> I, or members of my team working under my direction, have reviewed the following depositions and declarations: Deposition of Jacques Cressaty, October 22, 2021 ("Cressaty Deposition"); Deposition of Ben Sevier, November 4, 2021 ("Sevier Deposition"); Deposition of Michael Gaudet, November 8, 2021 ("Gaudet Deposition"); Deposition of Alison Lazarus, November 12, 2021 ("Lazarus Deposition"); Deposition of Rebecca Saletan, November 16, 2021 ("Saletan Deposition"); Deposition of Skip Dye, November 18, 2021 ("Dye Deposition"); Deposition of Jeff Weber, November 19, 2021 ("Weber Deposition"); Deposition of Chantal Restivo-Alessi, December 1, 2021 ("Restivo-Alessi Deposition"); Deposition of Josh Marwell, December 3, 2021 ("Marwell Deposition"); Deposition of Brenton Cheng, December 3, 2021 ("Cheng Deposition"); Deposition of Adam Silverman, December 6, 2021 ("Silverman Deposition"); Deposition of Alan Pavese, December 10, 2021 ("Pavese Deposition"); Deposition of Steve Potash, January 31, 2022 ("Potash Deposition"); and Declaration of Brenton Cheng, February 14, 2022 ("Cheng Declaration").

## D. Independence and Compensation Disclosure

- 6. I am an independent expert. I have no affiliation with any of the parties involved in the above-captioned matter. I also have no affiliation with counsel for Plaintiffs or Defendant, nor with the Court.
- 7. NERA was retained by counsel according to our pro bono retention terms.

  NERA's terms are not dependent on the opinions offered and are not contingent in any way on the outcome of the above-captioned litigation.

## II. Summary of Opinions

- 8. Based on the information available to me and my analysis to date, I have reached the following conclusions:
  - Internet Archive's patrons digitally borrowed the Works-in-Suit about 57 thousand times between 2017 and 2020. In this period, IA's loan volume of the Works-in-Suit was of OverDrive's digital lending volume of the same titles. The ratio of digital lending on IA relative to OverDrive for the Works-in-Suit varied from across Plaintiffs between 2017 and 2020.
  - About half of IA's total loan volume of the Works-in-Suit were lent out during the approximately three-month period following the launch of the National Emergency Library until its closing in mid-June 2020.
  - Using the abrupt closing of the National Emergency Library as a natural experiment, I test for possible substitution effects between IA's and OverDrive's digital lending for the Works-in-Suit, as well as for possible substitution effects between IA's digital lending and Plaintiffs' print and ebook sales for the Works-in-Suit. I conclude that the large reduction in IA's digital lending of the Works-in-Suit following the closing of the National Emergency Library was not associated with concurrent increases in digital lending through OverDrive, or with Plaintiffs' print and ebook sales of the Works-in-Suit. As such, the evidence is not consistent with Plaintiffs' purported theory that IA's digitized book loans acted as competing substitutes for sales that Plaintiffs would otherwise have made.

## III. Background

#### A. The Parties

#### 1. Plaintiffs

- 9. Hachette is a U.S. based publishing company headquartered in New York, NY, and a division of Hachette Livre, the third largest trade and educational book publisher in the world.<sup>5</sup> Hachette represents itself as a leading book publisher in the U.S., publishing more than 1,600 adult books (including 50-100 digital only titles), 350 books for young readers, and 700 audiobook titles each year.<sup>6</sup> Hachette's publishing divisions include imprints such as Grand Central Publishing; Little, Brown and Company; Little, Brown Books for Young Readers; Hachette Nashville; Orbit; and Perseus Books.<sup>7</sup>
- 10. HarperCollins, based in New York, NY, represents itself as the second largest consumer book publisher in the world, with more than 120 imprints around the world.<sup>8</sup> HarperCollins publishes approximately 10,000 new books every year in 16 languages and manages a print and digital catalog of more than 200,000 titles.<sup>9</sup>
- 11. Penguin Random House is a publisher headquartered in New York, NY. 10
  Penguin Random House has more than 300 independent imprints and brands that publish 70,000 digital and 15,000 print titles annually. 11 Penguin Random House has a catalog with more than 100,000 ebooks available worldwide. 12

<sup>&</sup>lt;sup>5</sup> "About Hachette Book Group," *Hachette Book Group*, available at https://www.hachettebookgroup.com/landing-page/about-hachette-book-group-2/ ("About Hachette"), accessed on January 5, 2022.

<sup>&</sup>lt;sup>6</sup> About Hachette.

<sup>&</sup>lt;sup>7</sup> "Imprints," *Hachette Book Group*, available at https://www.hachettebookgroup.com/imprints/, accessed on February 15, 2022.

<sup>&</sup>lt;sup>8</sup> "Company Profile," *HarperCollins Publishers*, available at https://www.harpercollins.com/pages/worldwide-company-profile ("About HarperCollins"), accessed on January 5, 2022.

<sup>&</sup>lt;sup>9</sup> About HarperCollins.

<sup>&</sup>lt;sup>10</sup> "Our Story," *Penguin Random House*, available at https://www.penguinrandomhouse.com/about-us/our-story/ ("About Penguin Random House"), accessed on January 5, 2022.

<sup>&</sup>lt;sup>11</sup> About Penguin Random House.

<sup>&</sup>lt;sup>12</sup> About Penguin Random House.

12. Wiley is a publishing company based in Hoboken, NJ. <sup>13</sup> Wiley develops education, professional and scientific books and journals in print and digital formats to promote lifelong learning. <sup>14</sup> Wiley publishes over 2,000 new books each year and offers over 120,000 titles. <sup>15</sup>

#### 2. Defendant

- 13. IA is a 501(c)(3) non-profit organization that represents itself as "building a digital library of internet sites and other cultural artifacts in digital form." In 1996, IA began to archive the Internet, which users can access through the "Wayback Machine." As of February 25, 2022, this digital archive of the internet contains more than 663 billion web pages. 18,19
- 14. In 2005, IA began to digitize books to "provide universal access" to digital versions of books.<sup>20</sup> IA has the capability to scan 4,000 books per day in 18 locations around the world, and its digital archive includes a total of 38 million books and texts.<sup>21</sup> According to IA, "[b]ooks published prior to 1927 are available for download, and hundreds of thousands of modern books can be borrowed" through IA's digital lending library.<sup>22</sup>

## B. Consumer Demand for Books Vary by Product Attributes

15. Books are what economists refer to as differentiated products. That is, each book title can be represented by a unique set of product attributes that are specific to a given title. As an economic matter, differentiated products are generally assumed to be close but not perfect substitutes, with the perceived degree of product substitutability likely to vary across

<sup>&</sup>lt;sup>13</sup> "About Wiley," Wiley, available at https://www.wiley.com/en-us/aboutus, accessed on January 5, 2022.

<sup>&</sup>lt;sup>14</sup> "About Us," Wiley, available at https://www.wiley.com/en-gb/aboutus, accessed on February 24, 2022.

<sup>&</sup>lt;sup>15</sup> Complaint, ¶ 19.

<sup>&</sup>lt;sup>16</sup> "About the Internet Archive," *Internet Archive*, available at https://archive.org/about/ ("About IA"), accessed on February 25, 2022.

<sup>&</sup>lt;sup>17</sup> About IA.

<sup>&</sup>lt;sup>18</sup> "Wayback Machine" Homepage, *Internet Archive*, available at https://archive.org/web/, accessed on February 25, 2022.

<sup>&</sup>lt;sup>19</sup> Beyond books and webpages, IA offers 7 million archived videos, 14 million archived audio recordings, 4 million archived images, and 790,000 software programs to its users. See, About IA.

<sup>&</sup>lt;sup>20</sup> About IA.

<sup>&</sup>lt;sup>21</sup> About IA.

<sup>&</sup>lt;sup>22</sup> About IA.

consumers.<sup>23</sup> For instance, some consumers may consider spy novels to be a close substitute for a murder mystery, while others may not.

- 16. Books have observable product attributes defined by, *e.g.*, their authors, content (*e.g.*, fiction or non-fiction), genre, format (*e.g.*, print or digital), size, layout, and popular and critical acclaim.<sup>24</sup> Consumers are likely to differ in terms of the importance they assign to each of these attributes.<sup>25</sup> For instance, some readers may have a strong preference for political autobiographies as a genre, whereas other readers may only want ebooks as they prefer to read on the go. Consumer needs are also likely to differ across readers. For example, students may need to read specific titles to complete their assignments.
- 17. Consumers may access books by purchasing or renting titles from a large number of booksellers. Alternatively, consumers may borrow books from local libraries (or from their friends and relatives). Whether consumers decide to buy, rent, or borrow books will likely depend on their preferences, needs, income, and the price they would have to pay. Some consumers may prefer to own a book because they expect to use it repeatedly as a reference or study book. Similarly, some consumers may enjoy seeing a book on their bookshelves (which they can share with family and friends). Owning a book also means that readers can take the time to read it, write notes and comments in it, and more directly support the authors whose work they like. On the other hand, borrowing books from local libraries provides readers access to literary works at no out-of-pocket costs to the reader.

<sup>&</sup>lt;sup>23</sup> Mankiw, N. Gregory, "Principles of Microeconomics," (5<sup>th</sup> Edition), (South-Western Cengage Learning, 2009) ("Principles of Microeconomics"), p. 90.

<sup>&</sup>lt;sup>24</sup> Leemans, H. and M. Stokmans, "Attributes used in choosing books," *Poetics: International Review for the Theory of Literature*, Vol. 20 (1991) ("Attributes in Choosing Books"), p. 490.

<sup>&</sup>lt;sup>25</sup> Attributes in Choosing Books, p. 490.

<sup>&</sup>lt;sup>26</sup> For instance, Amazon launched its textbook rental program in 2012. "Amazon starts renting out printed textbooks," *Los Angeles Times*, available at https://www.latimes.com/business/la-xpm-2012-aug-07-la-fi-amazon-textbook-rental-20120807-story html, accessed on February 15, 2022; "Amazon Launches Textbook Rental," *Amazon*, available at https://press.aboutamazon.com/news-releases/news-release-details/amazon-launches-textbook-rental/, accessed on February 15, 2022.

<sup>&</sup>lt;sup>27</sup> "Who do you borrow books from?," *Statista*, available at https://www.statista.com/statistics/703768/book-borrowing-locations/, accessed on February 15, 2022.

- 18. Economic theory indicates that consumers decide which products to obtain based on their needs, preferences, income, and the relative prices they face in the marketplace.<sup>28</sup> Several factors influence consumers' demand for books. For instance, some consumers may prefer print books because of their physical size, print quality, feel and appearance, reduced eye strain, etc. Ebooks may provide consumers benefits such as increased portability, being able to customize the formatting (*e.g.*, by changing the font size), and improving the searchability of literary works.<sup>29</sup> Consumers trade off product attributes while also considering factors such as price, income, and convenience when deciding whether to buy a book from a retailer (or borrow the title from a local library).
- 19. Institutions such as public libraries also demand books. Public libraries provide access to books and other information through lending to local communities.<sup>30</sup> Libraries increase book sales by buying books for circulation to their patrons, hosting author events, and featuring works prominently in local communities.<sup>31</sup> Public libraries do this at scale: in fact, public libraries get over a billion visits every year in the U.S.<sup>32</sup>

## C. Publishers Sell Books Through Distinct Distribution Channels

- 20. Books are sold in a variety of ways. Common distribution channels for physical books include chain bookstores (*e.g.*, Barnes & Noble); independent bookstores; "big-box" stores (*e.g.*, Costco, Target, and Walmart); online retailers (*e.g.*, Amazon); and local and large libraries.<sup>33</sup>
- 21. For publishers, the book trade consisting of chain and independent bookstores is important for distributing a larger set of titles from a given publisher's catalog.<sup>34</sup> In contrast,

<sup>&</sup>lt;sup>28</sup> Principles of Microeconomics, pp. 70-71.

<sup>&</sup>lt;sup>29</sup> Zhang, Yin and Sonali Kudva, "Ebooks vs. Print Books: Readers' Choices and Preferences Across Contexts," *Journal of the American Society for Information Science and Technology*, Vol. 65 No. 8 (2013), pp. 3-4.

<sup>&</sup>lt;sup>30</sup> "It's called a Public Library! Here's how it works…," *Medium*, available at https://medium.com/everylibrary/its-called-a-public-library-here-s-how-it-works-9a63cc6614f5\_("Public Library: How it Works")\_accessed on February 15, 2022.

<sup>&</sup>lt;sup>31</sup> "How Libraries Help Authors Boost Book Sales," *Forbes*, available at https://www.forbes.com/sites/rachelkramerbussel/2019/04/12/how-libraries-boost-book-sales/?sh=121f41f24d76 ("Libraries Boost Book Sales"), accessed on February 15, 2022.

<sup>&</sup>lt;sup>32</sup> Public Library: How it Works.

<sup>&</sup>lt;sup>33</sup> Sevier Deposition, pp. 39-42.

<sup>&</sup>lt;sup>34</sup> Sevier Deposition, p. 41.

big-box retailers take fewer titles in larger quantities.<sup>35</sup> Sales to libraries combine elements of bookstores and big-box retailers, with libraries often acquiring a wide range of titles from publishers through wholesalers such as Baker + Taylor and Ingram.<sup>36,37</sup>

22. Online retailers such as Amazon have also emerged as a major distribution channel of physical books in recent years.<sup>38</sup> This is because online vendors are able to offer the same product but can do it cheaper and faster for the consumers when compared to bookstores.<sup>39</sup>

## D. Ebook Lending Through OverDrive

23. Publishers distribute, for the most part, ebooks to libraries using third-party vendors such as OverDrive, Bibliotheca, and Hoopla (collectively, "aggregators"). 40 OverDrive represents itself as offering the largest digital content catalog in the world, and it claims to work with more than 76,000 libraries and schools in 94 countries. 41 The business model of aggregators such as OverDrive is to buy digital distribution rights to ebooks from publishers and then sell lending rights and services to libraries. 42 According to its Chief Executive Office Steve Potash, OverDrive has a market share in the U.S. public library ebook market, with Plaintiffs accounting for of OverDrive's ebook sales in the U.S. 43



<sup>&</sup>lt;sup>35</sup> Sevier Deposition, p. 41.

otash Deposition, pp. 38-39.

<sup>&</sup>lt;sup>36</sup> Libraries Boost Book Sales.

<sup>&</sup>lt;sup>37</sup> Marwell Deposition, p. 59.

<sup>&</sup>lt;sup>38</sup> "Amazon Has Basically No Competition Among Online Booksellers," *The Atlantic*, available at https://www.theatlantic.com/business/archive/2014/05/amazon-has-basically-no-competition-among-online-booksellers/371917/ ("No Competition Among Online Booksellers"), accessed on February 22, 2022.

<sup>&</sup>lt;sup>39</sup> No Competition Among Online Booksellers.

<sup>&</sup>lt;sup>40</sup> "The Surprisingly Big Business of Library E-Books," *The New Yorker*, available at https://www.newyorker.com/news/annals-of-communications/an-app-called-libby-and-the-surprisingly-big-business-of-library-e-books ("The Surprisingly Big Business of Library E-Books"), accessed on February 15, 2022.

<sup>&</sup>lt;sup>41</sup> "Who We Are," *OverDrive*, available at https://company.overdrive.com/company-profile/who-we-are/ ("About OverDrive"), accessed on February 15, 2022.

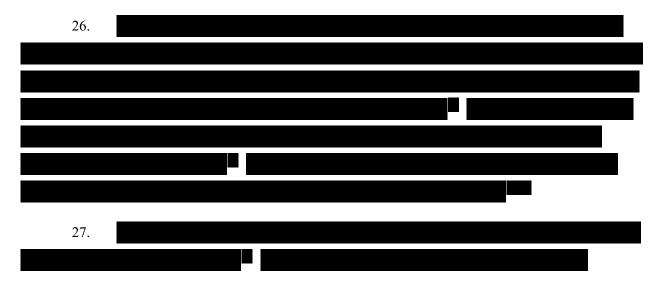
<sup>&</sup>lt;sup>42</sup> The Surprisingly Big Business of Library E-Books.

<sup>&</sup>lt;sup>43</sup> Potash Deposition, pp. 16, 196-198.

<sup>&</sup>lt;sup>44</sup> Potash Deposition, pp. 30-31. According to Mr. Potash,



25. Depending on its agreements with publishers, OverDrive offers several purchasing and lending options to libraries.<sup>47</sup> These options include the "One Copy/One User" model, which allows libraries to lend out one copy at a time to their patrons, with no expiration on the libraries' digital collections.<sup>48</sup> Other options include "Metered Access" models in which publishers cap the number of loans or the period through which libraries can offer a given ebook.<sup>49</sup>



<sup>&</sup>lt;sup>45</sup> Potash Deposition, pp. 32-33.

<sup>&</sup>lt;sup>46</sup> Potash Deposition, pp. 35-36.

<sup>&</sup>lt;sup>47</sup> "Getting Started with Lending Models," *OverDrive*, available at https://training.cdn.overdrive.com/Library/MP/1-LM-overview.pdf\_("Getting Started with Lending Models"), accessed on February 15, 2022.

<sup>&</sup>lt;sup>48</sup> Getting Started with Lending Models; Potash Deposition, pp. 49-50.

<sup>&</sup>lt;sup>49</sup> Getting Started with Lending Models.

<sup>&</sup>lt;sup>50</sup> Potash Deposition, pp. 50-51.

<sup>&</sup>lt;sup>51</sup> Potash Deposition, p. 51.

<sup>&</sup>lt;sup>52</sup> Potash Deposition, p. 52.

\_\_\_\_

<sup>&</sup>lt;sup>54</sup> Potash Deposition, pp. 44, 68.



29. The access models offered by publishers vary in terms of their pricing structure and when OverDrive charges libraries for its services. For instance, OverDrive collects revenues in the month when libraries place an order under the 24-month metered access model. <sup>59</sup> In contrast, OverDrive invoices libraries at the end of the month for any titles circulated in that month under the "Cost Per Checkout" model. <sup>60</sup> According to Mr. Potash, over 90 percent of the 9,000 public libraries in the U.S. have "some access to digital book lending with OverDrive." <sup>61</sup> As such, OverDrive collects its revenues from a large number of libraries across the titles in their collections whose payment schedules may differ according to the specific access model they have agreed to.



<sup>&</sup>lt;sup>55</sup> Potash Deposition, p. 67.

<sup>&</sup>lt;sup>56</sup> Potash Deposition, pp. 67-68.

<sup>&</sup>lt;sup>57</sup> Potash Deposition, pp. 39, 45-46.

<sup>&</sup>lt;sup>58</sup> Potash Deposition, pp. 46-47.

<sup>&</sup>lt;sup>59</sup> Potash Deposition, p. 120.

<sup>&</sup>lt;sup>60</sup> Potash Deposition, pp. 120-121.

<sup>&</sup>lt;sup>61</sup> Potash Deposition, pp. 161-162.

<sup>&</sup>lt;sup>62</sup> Potash Deposition, pp. 82-84.

<sup>&</sup>lt;sup>63</sup> Potash Deposition, pp. 96-97.

<sup>&</sup>lt;sup>64</sup> Potash Deposition, p. 97.

OverDrive has millions of users, with a total of 1.8 million reviews of OverDrive's Libby reading app on the Apple App Store (giving it a rating of 4.8 stars).<sup>65</sup>

## E. The Internet Archive's Digital Lending Library

- 1. The Digital Lending Library and Controlled Digital Lending
- 31. The Internet Archive's digital lending library lets patrons borrow books through the IA website (archive.org) and its online library catalog, Open Library (openlibrary.org).<sup>66</sup> The digital lending library has a collection of about 3.2 million books available to borrow in digital form, as well as millions of public domain books available in various formats.<sup>67,68</sup> The literary works available for borrowing from the digital lending library consist of digitized versions of physical books IA has in its collection (or through partner libraries).<sup>69</sup>
- 32. The Internet Archive lets patrons access books they have borrowed from the digital lending library through its online BookReader, or in encrypted PDF and encrypted EPUB formats. <sup>70,71</sup> These formats allow patrons to read books in their web browser as well as on certain tablets (*e.g.*, iPad and Android tablets) using third-party apps such as Adobe Digital Editions, BlueFire Reader, or Aldiko Book Reader. <sup>72</sup> At present, patrons can borrow ten books at a time from the digital lending library. <sup>73</sup> If the Internet Archive has only one copy available of

<sup>&</sup>lt;sup>65</sup> "Libby, by OverDrive", *App Store*, available at https://apps.apple.com/us/app/libby-by-overdrive/id1076402606, accessed on February 15, 2022.

<sup>&</sup>lt;sup>66</sup> "Books to Borrow," *Internet Archive*, available at https://archive.org/details/inlibrary ("IA Books to Borrow"), accessed on February 22, 2022; "About Open Library," *Open Library*, available at https://openlibrary.org/help/faq/about ("About Open Library"), accessed on February 15, 2022.

<sup>&</sup>lt;sup>67</sup> "Reading Books on Open Library," *Open Library*, available at https://openlibrary.org/help/faq/reading, accessed on February 15, 2022.

<sup>&</sup>lt;sup>68</sup> IA Books to Borrow.

<sup>&</sup>lt;sup>69</sup> "Bookscanning Launch and Vision of an Open Library," *Internet Archive Blogs*, available at https://blog.archive.org/2005/11/08/bookscanning-launch-and-vision-of-an-open-library/, accessed on February 15, 2022.

<sup>&</sup>lt;sup>70</sup> "Borrowing Books Through Open Library," *Open Library*, available at https://openlibrary.org/help/faq/borrow ("Borrowing Books Through Open Library"), accessed on February 15, 2022.

<sup>&</sup>lt;sup>71</sup> The encrypted EPUBs made available by IA are, according to IA, uncorrected and error-prone conversions of scanned images to text. As such, IA describes its EPUB offering as "not a high quality EPUB like you would find with a modern ebook." See, "Internet Archive responds: Why we released the National Emergency Library," *Internet Archive Blog*, available at http://blog.archive.org/2020/03/30/internet-archive-responds-why-we-released-the-national-emergency-library/, accessed on February 22, 2022.

<sup>&</sup>lt;sup>72</sup> Borrowing Books Through Open Library.

<sup>&</sup>lt;sup>73</sup> Borrowing Books Through Open Library.

a book, it is available for a one-hour loan; if there is more than one copy, the book is available for either one-hour or fourteen-day loans, depending on availability.<sup>74</sup> Loans may be returned before the end of the one-hour or two-week period.<sup>75</sup>

33. The digital lending library has relied on a process called Controlled Digital Lending ("CDL") since 2011.<sup>76</sup> Under CDL, a library "circulates the exact number of copies of a specific title it owns, regardless of format, putting controls in place to prevent users from redistributing or copying the digitized version."<sup>77</sup> In this way, the digital lending library uses technical controls to maintain an "owned-to-loaned" ratio by making books available for borrow by "one patron at a time" for each physical copy it owns.<sup>78</sup>

### 2. The National Emergency Library

34. On March 24, 2020, citing the closure of local libraries and the self-quarantining of patrons during the onset of the COVID-19 pandemic, the Internet Archive launched the National Emergency Library ("NEL"), in which it by technical means no longer limited the number of concurrent loans to the number of copies in its collection (or to those contributed by partner libraries) for the 1.4 million "modern" books then available in its digital lending library. The National Emergency Library was set to last until "June 30, 2020, or the end of the US national emergency, whichever [was] later." On June 10, 2020, the Internet Archive

<sup>&</sup>lt;sup>74</sup> Cheng Deposition, p. 153.

<sup>&</sup>lt;sup>75</sup> Borrowing Books Through Open Library.

<sup>&</sup>lt;sup>76</sup> "Transforming Our Libraries: 12 Stories About Controlled Digital Lending," *Controlled Digital Lending*, available at https://controlleddigitallending.org/sites/default/files/transforming-our-libraries.pdf, accessed on February 24, 2022.

<sup>&</sup>lt;sup>77</sup> "Controlled Digital Lending by Libraries," *Controlled Digital Lending*, available at https://controlleddigitallending.org/ ("Controlled Digital Lending by Libraries"), accessed on February 15, 2022.

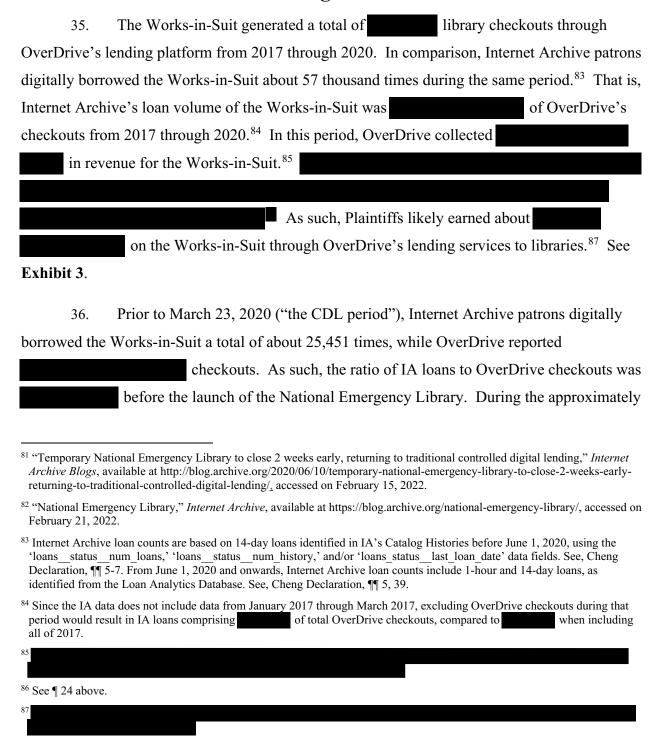
<sup>&</sup>lt;sup>78</sup> Borrowing Books Through Open Library; Controlled Digital Lending by Libraries.

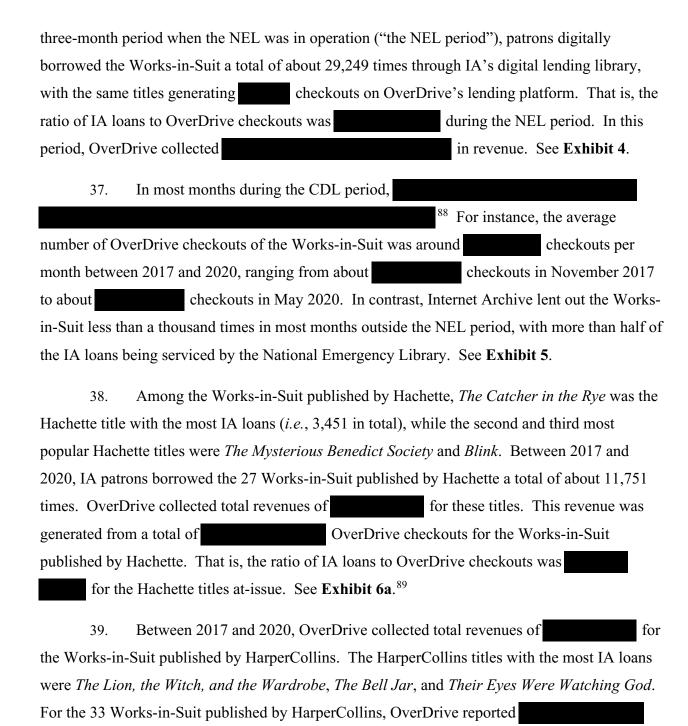
<sup>&</sup>lt;sup>79</sup> "Announcing a National Emergency Library to Provide Digitized Books to Students and the Public," *Internet Archive Blogs*, available at http://blog.archive.org/2020/03/24/announcing-a-national-emergency-library-to-provide-digitized-books-to-students-and-the-public/ ("Announcing NEL"), accessed on February 15, 2022.

<sup>&</sup>lt;sup>80</sup> Announcing NEL.

announced that it would close the National Emergency Library and return to traditional controlled digital lending.<sup>81</sup> The National Emergency Library closed on June 16, 2020.<sup>82</sup>

## IV. The Internet Archive Lent Out a Small Volume of the Worksin-Suit Relative to Other Digital Libraries



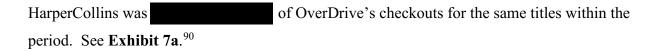


at-issue around 22,475 times. That is, IA's loan volume of the Works-in-Suit published by

checkouts between 2017 and 2020, while IA patrons digitally borrowed the HarperCollins titles

<sup>&</sup>lt;sup>88</sup> The average monthly IA loans was 707 loans during the CDL period, *i.e.*, April 2017 – March 2020. IA monthly loans exceeded 1,000 loans in only 8 out of the 36 months during the CDL period.

<sup>&</sup>lt;sup>89</sup> During the CDL period, the total IA loan was approximately 5.9 thousand units for the Works-in-Suit published by Hachette, while the total was 5.5 thousand units during the NEL period. See **Exhibit 6b**.



40. For the Works-in-Suit published by Penguin Random House, *Lord of the Flies*, *The Bluest Eye*, and *Into the Wild* had the most IA loans between 2017 and 2020. In this period, OverDrive collected total revenues of for the 48 Penguin Random House titles among the Works-in-Suit. This revenue was generated from OverDrive checkouts for the Penguin Random House titles at-issue. For the same Penguin Random House titles, IA patrons borrowed them around 21 thousand times from IA's digital lending library. That is, the ratio of IA loans to OverDrive checkouts was for the Works-in-Suit published by Penguin Random House. See **Exhibit 8a**. 91

Among the Works-in-Suit published by Wiley, OverDrive collected total revenues of This revenue was generated from a total of OverDrive checkouts for the Wiley titles among the Works-in-Suit. For the same Wiley titles, IA patrons borrowed them around two thousand times. That is, IA's loan volume of the Wiley titles at-issue was of OverDrive's checkouts for the same titles between 2017 and 2020. See Exhibit 9a. 92

## V. The Peak Number of Internet Archive Loans Taken Out During the National Emergency Library

42. In late-March 2020, the Internet Archive launched the National Emergency Library, in which it by technical means no longer limited the number of concurrent loans to the number of copies in its collection (or to those contributed by partner libraries), providing patrons with instant access to 14-day loans of the books in its digital collection (including the Works-in-Suit).<sup>93</sup>

<sup>&</sup>lt;sup>90</sup> For the Works-in-Suit published by HarperCollins, the total IA loan total was about 8.5 thousand units during the CDL period, while the total was approximately 13.0 thousand units during the NEL period. See **Exhibit 7b**.

<sup>&</sup>lt;sup>91</sup> During the CDL period, the total IA loan was about 9.7 thousand units for the Works-in-Suit published by Penguin Random House, while the total was 10.2 thousand units during the NEL period. See **Exhibit 8b**.

<sup>&</sup>lt;sup>92</sup> For the Works-in-Suit published by Wiley, the total IA loan was about 1.4 thousand units during the CDL period, while the total was 521 units during the NEL period. See **Exhibit 9b**.

<sup>&</sup>lt;sup>93</sup> See ¶ 34 above.

43.	During the NEL period	d,94 the maximum month	ly IA loan totals for the W	orks-in-
Suit ("peak me	onthly IA loan total") ra	anged from 6 to 1,296 un	its for the least popular an	d the
most popular	Hachette titles at-issue (	i.e., Today Will Be Differ	rent and The Catcher in th	ie Rye,
respectively).	The ratio of peak mont	hly IA loans to concurre	nt OverDrive checkouts ("	peak
ratio") was, or	n average,	anging from ratios of	for Invisib	le to
for Th	e Catcher in the Rye,			
			See Exhibit 10.	
44.	Among the 33 Works-	In-Suit published by Har	perCollins, <i>The Lion, the</i> 1	Witch,
and the Wardi	obe was the title with the	he most IA loans (i.e., 1,	510) during the NEL perio	od.
	On	average, the peak ratio d	uring the NEL period was	
for the	HarperCollins titles at-	issue. See Exhibit 11.		
45.	For the Works-in-Suit	published by Penguin Ra	andom House, Lord of the	Flies
had the greate	st peak monthly IA loan	total (i.e., 1,697), with a	a peak ratio of	relative
to concurrent	OverDrive checkouts.			
				On
average, the p	eak ratio was	for the 48 Penguin Ran	dom House titles at-issue.	See
Exhibit 12.				
46.	During the NEL period	d, the peak monthly loan	totals ranged from 2 to 42	for the
19 Wiley titles	s at-issue. The two most	t popular Wiley titles (i.e	., The Energy Bus and The	e Five
Dysfunctions of	of a Team) had peak rati	ios of	respectively. See Exhibit	t 13.

## VI. The Evidence Is Not Consistent with Plaintiffs' Purported Theory that Internet Archive's Book Loans are Substitutes for Loans of the Works-in-Suit From Other Digital Libraries

47. Plaintiffs represent IA as an "unlicensed aggregator" whose services closely resemble those provided by OverDrive and other aggregators. 95 Plaintiffs further allege that IA

 $<sup>^{94}</sup>$  IA launched the NEL on March 24, 2020 and closed the NEL on June 16, 2020. See  $\P$  34 above.

<sup>&</sup>lt;sup>95</sup> Complaint, ¶¶ 80-82.

"directly harms the Plaintiffs' print *and* ebook markets in all market segments by providing competing substitutes for numerous original works currently available in their catalogs." <sup>96</sup>

- 48. To test whether IA's digital loans of the Works-in-Suit acted as substitutes for ebook lending through OverDrive (as alleged by Plaintiffs), I consider how the closing of the National Emergency Library impacted OverDrive's checkouts of the Works-in-Suit. In this before-and-after comparison, one would expect, according to Plaintiffs' purported theory of competing substitutes, that OverDrive would see an increase in the number of checkouts of the Works-in-Suit once IA ended NEL and returned to a lending policy based on CDL (with the number of concurrent loans being restricted by the number of physical books in IA's or its partner libraries' possession).
- 49. The closing of the National Emergency Library represents what economists refer to as a "natural experiment." That is, it is a specific period of time during which IA's loans of the Works-in-Suit decreased from their peak levels to less than a few thousand loans of the Works-in-Suit being offered to IA's patrons. To the extent that any IA loan of the Works-in-Suit acted as a competing substitute, as alleged by Plaintiffs, one would expect Plaintiffs' purported substitution effect to result in increasing OverDrive checkouts after the closing of NEL. 99
- 50. IA's loan volume of the Works-in-Suit decreased by about 27.6 thousand units between the second and third quarter of 2020, while OverDrive's checkouts of the same titles

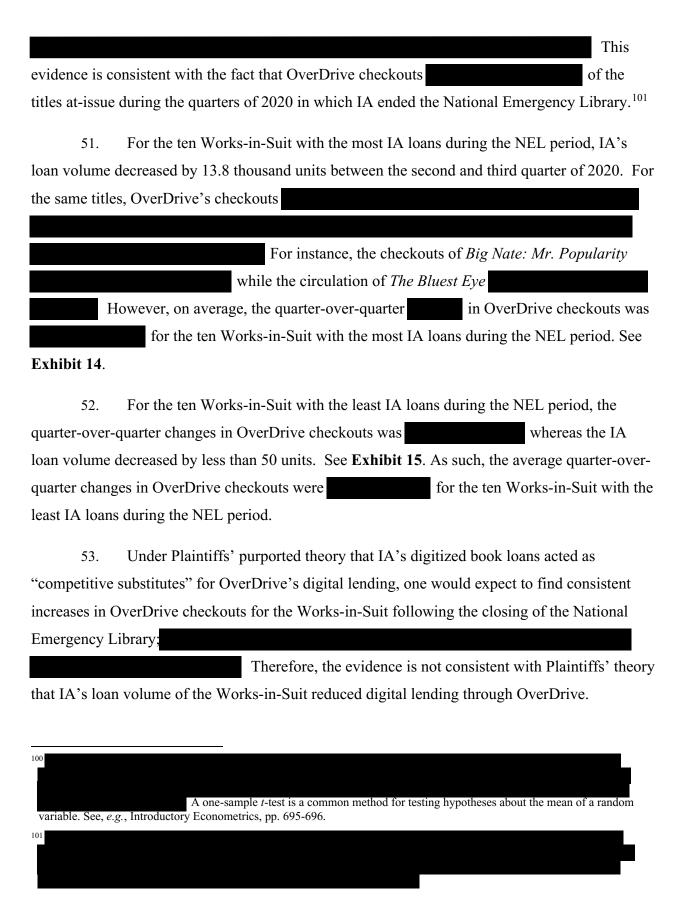
Moreover, a statistical test of the mean change in OverDrive checkouts

<sup>&</sup>lt;sup>96</sup> Complaint, ¶ 65.

<sup>&</sup>lt;sup>97</sup> In economics, a "natural experiment" describes a "situation where the economic environment ... exogenously changes, perhaps inadvertently, due to a policy or institutional change." See Wooldridge, Jeffrey M., "Introductory Econometrics: A Modern Approach," (6<sup>th</sup> Edition) (Cengage Learning, 2016) ("Introductory Econometrics"), p. 764.

<sup>98</sup> See Exhibits 4 and 5.

<sup>&</sup>lt;sup>99</sup> For the before-and-after analysis, I consider quarter-over-quarter changes in relevant outcomes (*e.g.*, OverDrive checkouts and IA loans). This research design reflects a trade-off between analyzing information close in time to the event (*i.e.*, the closing of the NEL), while also having enough information to draw inferences about possible trends in the outcome variables over time.



## VII. The Evidence Is Not Consistent With Plaintiffs' Purported Theory that Internet Archive's Book Loans are Substitutes for Plaintiffs' Paperback and Ebook Sales of the Works-in-Suit

- 54. As discussed above, Plaintiffs allege to have been directly harmed in all market segments by IA's digitized book loans of the Works-in-Suit provided through its digital lending library. <sup>102</sup> To test this hypothesis, I consider how the closing of NEL impacted Plaintiffs' book sales in market segments other than the digital library lending market. This research design and methodology necessitate monthly or quarterly sales data by market segment for each of the Works-in-Suit. I understand that Hachette has produced monthly sales data by individual customers and book formats in 2020 for each of its Works-in-Suit. <sup>103</sup> As a result, I am able to analyze how the closing of NEL impacted Hachette's book sales by market segment. I also understand that the remaining Plaintiffs (*i.e.*, HarperCollins, Penguin Random House, and Wiley) have produced annual sales data in this matter. <sup>104</sup> However, since the closing of NEL happened in mid-2020, it is not possible to assess its impact, if any, on Plaintiffs' book sales using annual data. For that reason, my analysis of Plaintiffs' book sales is limited to Hachette given the information available in the record.
- 55. Hachette collected total net sales of \$7.7 million dollars in 2020 for the Works-in-Suit, with most of Hachette's net sales being generated by paperback books (about \$3.8 million), audio books (about \$2.2 million), and ebooks (about \$1.3 million). However, these sales figures appear to include Hachette's sales of the Works-in-Suit outside the U.S. Moreover, there appears to be no available field in the data that readily identifies Hachette's book sales in the U.S. For that reason, I restrict my analysis of Hachette's paperback sales to its three leading

<sup>&</sup>lt;sup>102</sup> Complaint, ¶¶ 65, 120.

<sup>&</sup>lt;sup>103</sup> HACHETTE0002475. I note that the data provided do not include the title *The Mysterious Benedict Society*.

<sup>&</sup>lt;sup>104</sup> See, e.g., HC0010272, PRH0025907, and WILEY0005650.

<sup>&</sup>lt;sup>105</sup> The monthly sales data from Hachette (i.e., HACHETTE0002475) reports gross sales, returns, and net sales. In the data, net sales are equal to gross sales minus returns. I compute net sales by book format using the data fields "USDNetAmt" (net sales) and "ItemFamCodeEFormatName" (book format). Hachette sold additional formats of the Works-in-Suit which also contributed to its net sales of about 7.7 million dollars, including: Hardcover books (about -\$573K in net sales), paper over board books (about \$56K in net sales), and mass market books (about \$876K in net sales).

<sup>&</sup>lt;sup>106</sup> For instance, the Hachette sales data includes transactions to accounts such as "AMAZON EU SARL DE," "AMAZON EU SARL," "AMAZON.COM.CA, INC.," "AMAZON.COM JAPAN," and "APPLE INC – CANADA SALES." These accounts are identified using the "Acct Name" data field available in HACHETTE0002475.

accounts associated with Amazon.com and Barnes & Noble, which account for about 72 percent of the total net revenues Hachette collected on its paperback sales (of about \$3.8 million). <sup>107</sup> Similarly, I restrict my analysis of electronic book sales to Hachette's top accounts in this category that can reasonably be expected to capture Hachette's sales in the U.S. <sup>108</sup> These accounts accounted for 89 percent of Hachette's ebook net sales (of about \$1.3 million).

- 56. For the 23 Works-in-Suit published by Hachette with available data, IA's loan volume decreased by 4,491 units between the second and third quarter of 2020. <sup>109</sup> That is, IA's loan volume decreased by about four thousand loans from their peak levels during the NEL period to the following quarter where IA loans numbered just a few hundred units. To the extent that any IA loan of the 23 Hachette titles at-issue is alleged to have acted as a competing substitute for Hachette's paperback and ebook sales, one would expect Plaintiffs' purported substitution effect to result in increasing paperback and ebook sales for the Hachette titles at-issue after the closing of NEL.
- 57. Hachette's paperback sales of the Works-in-Suit decreased by about 21.4 thousand paperback copies between the second and third quarter of 2020. In relative terms, the quarter-over-quarter decrease in Hachette's paperback sales of the Works-in-Suit was approximately 21 percent, with 19 of the 23 Hachette titles at-issue reporting declining paperback sales between the second and third quarter of 2020. As such, the reduction in IA's loan volume following the closing of NEL happened at the same time as Hachette's paperback sales contracted, which is not indicative of the "substitution" effect purported by Plaintiffs. See **Exhibit 16a**. 111

<sup>&</sup>lt;sup>107</sup> These accounts include "AMAZON.COM," "BARNES & NOBLE DC," and "BARNES & NOBLE DIST CTR," as identified by the "AcctName" data field in HACHETTE0002475.

<sup>&</sup>lt;sup>108</sup> These accounts include "AMAZON DIGITAL," "APPLE INC E-BOOK," "BARNES & NOBLE E-BOOK," "GOOGLE EBOOKS," and "OVERDRIVE E-BOOK," as identified by the "AcctName" data field in HACHETTE0002475.

<sup>109</sup> Exhibit 16a.

<sup>&</sup>lt;sup>110</sup> A one-sample *t*-test for the null hypothesis of a zero mean change in Hachette's paperback sales for the Works-in-Suit between the second and third quarter of 2020 produces a 95% confidential interval ranging from -1,666 to -196. As such, this test rejects the hypothesis of no average change in Hachette's paperback sales in favor of a negative average trend for its paperback sales of the Work-in-Suit between quarters two and three in 2020. The same conclusion is also reached when considering a statistical test of the mean percentage change in Hachette's paperback sales of the Works-in-Suit between the second and third quarter of 2020.

When considering Hachette's paperback sales to all accounts included in the monthly sales data (*i.e.*, HACHETTE0002475), the decline in Hachette's paperback sales of the Works-in-Suit was about 13 percent between the second and third quarter of

58. Hachette's ebook sales of the Works-in-Suit decreased by about 29 percent between the second and third quarter of 2020. 112 Relative to Hachette's Q2 ebook sales, IA's loan volume of the Works-in-Suit published by Hachette decreased by nine percent from its peak levels during the NEL period to the next quarter in which IA had ended NEL. 113 This evidence indicates that Hachette's ebook sales of the Works-in-Suit decreased at a rate greater than the relative decrease in IA's loan volume of the Hachette titles at-issue. That is, the reduction in IA's digital lending of the Works-in-Suit published by Hachette between the second and third quarter of 2020 was not associated with increased ebook sales to Hachette, as one would expect according to Plaintiffs' purported theory of "competing substitutes." See **Exhibit 17a**. 114

\*\*\*\*\*\*\*\*\*\*\*\*\*\*

I respectfully reserve the right to update the conclusions expressed above should additional information become available to me.

Rasmus Jørgensen, Ph.D.

February 25, 2022

<sup>2020.</sup> See **Exhibit 16b**. As such, the reduction in IA's loan volume following the closing of NEL coincided with a contraction in Hachette's overall paperback sales, which is not indicative of the "substitution" effect purported by Plaintiffs.

<sup>112</sup> These sales include Hachette's ebook sales to Amazon, Apple, Barnes & Noble, and Google. See, footnote 108. Since Hachette's ebook sales to OverDrive was considered in Section VI, I have excluded them from the analysis presented in this section.

<sup>&</sup>lt;sup>113</sup> A one-sample *t*-test for the null hypothesis of a zero mean change in Hachette's ebook sales for the Works-in-Suit between the second and third quarter of 2020 produces a 95% confidential interval ranging from -1,097 to -21. As such, this test rejects the hypothesis of no average change in Hachette's ebook sales in favor of a negative average trend for its ebook sales of the Work-in-Suit between quarters two and three in 2020. The same conclusion is also reached when considering a statistical test of the mean percentage change in Hachette's ebook sales of the Works-in-Suit between the second and third quarter of 2020.

<sup>114</sup> When considering Hachette's ebook sales to all accounts listed in the monthly sales data (*i.e.*, HACHETTE0002475) the decline in Hachette's ebook sales of the Works-in-Suit was about 29 percent between the second and third quarter of 2020. See **Exhibit 17b**. As such, the reduction in IA's loan volume following the closing of NEL coincided with a contraction in Hachette's overall ebook sales, which is not indicative of the "substitution" effect purported by Plaintiffs.





**EXHIBIT 1** 

## Rasmus Jørgensen, Ph.D.

Dr. Jørgensen is a Senior Consultant in NERA's Intellectual Property Practice, where he provides economic research and analysis to support complex litigation. His areas of focus are conducting damages analysis in the context of patent infringement, misappropriation of trade secrets, breaches of contract, and anticompetitive behavior. Dr. Jørgensen has expertise in applying rigorous economic and econometric methods to calculate lost profits, reasonable royalty, and economic damages in a wide range of industries, including aerospace, consumer goods, transportation, pharmaceuticals, and power generation.

#### **Education**

### **University of Copenhagen**

Ph.D., Economics, 2011 M.Sc., Economics, 2009 B.Sc., Economics, 2005

#### **Princeton University**

Visiting graduate student, 2008-2010

## **Professional Experience**

2019-	NERA Economic Consulting Senior Consultant
2014-2019	University of Copenhagen Assistant Professor Taught courses in Statistics, Econometrics, and International Trade for undergraduate and graduate students.
2013-2014	University of Copenhagen Postdoctoral Research Fellow
2011-2013	Yale University Postdoctoral Research Fellow

#### **Honors and Professional Activities**

Fulbright Scholarship, Princeton University, 2008.

Postdoctoral Research Grant, Independent Research Fund Denmark, 2011.

The Invisible Hand Award (teacher of the year award), University of Copenhagen, 2014.

## **Publications**

"Does Temporary Generic Competition Have a Lasting Impact on Branded Drug Sales?" (with D. Blackburn), NERA White Paper, 2021.

"The Wage Effects of Offshoring: Evidence from Danish Matched Worker-Firm Data" (with D. Hummels, J.R. Munch and C. Xiang), *American Economic Review*, 104(6), 2014.

"Understanding Cross-country differences in Export Premia" (with Joachim Wagner, et al.), *Review of World Economics*, 144(4), 2008.

"Defining and Measuring Entrepreneurship" (with J. Iversen and N. Malchow-Møller), *Foundations and Trends in Entrepreneurship*, 4(1), 2008.

#### Referee

American Economic Journal: Applied Economics, Canadian Journal of Economics, Danish Journal of Economics, Economic Inquiry, European Economic Review, Industrial Relations, Journal of Economic Behavior & Organization, Journal of Human Resources, Journal of Labor Economics, Labour Economics, Oxford Bulletin of Economics and Statistics, Review of International Economics, Review of World Economics, Scandinavian Journal of Economics, the Economic Journal.

## OverDrive Revenue, OverDrive Checkouts and IA Loans by Year 2017-2020

	OverDrive	OverDrive	IA
Year	Revenue	Checkouts	Loans <sup>1</sup>
	(dollars)	(units)	(units)
(a)	<b>(b)</b>	(c)	<b>(d)</b>
2017			2,330
2018			4,301
2019			10,828
2020			39,691
Total			57,150

Notes: <sup>1</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

**Sources:** INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; OverDrive\_Supp\_002.

## OverDrive Revenue, OverDrive Checkouts and IA Loans by Period 2017-2020

Period <sup>1</sup>	OverDrive	OverDrive	IA
	Revenue	Checkouts	Loans <sup>2</sup>
(a)	(dollars)	(units)	(units)
	(b)	(c)	(d)
CDL NEL Post NEL			25,451 29,249 2,450
Total			57,150

Notes: <sup>1</sup> CDL refers to the period from January 2017 to March 23, 2020 (the day before NEL launch).

NEL refers to the period from March 24, 2020 to June 16, 2020. Post NEL refers to the period from June 17 through the rest of 2020. March and June data are prorated using the number of days according to the definitions of the CDL, NEL and Post NEL periods.

<sup>2</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

**Sources:** 

INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; OverDrive\_Supp\_002.

Case 1:20-cv-04160-JGK-OTW Document 108-1 Filed 07/07/22 Page 28 of 48
Highly Confidential Expert Report of Rasmus Jørgensen, Ph.D.
Attorneys' Eyes Only

## OverDrive Checkouts and IA Loans by Month January 2017 - October 2021



**Sources:** INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080

- AEO; OverDrive\_Supp\_002.

# OverDrive Revenue, OverDrive Checkouts and IA Loans by Hachette Title Jan 2017 - Aug 2020

Title <sup>1</sup>	OverDrive Revenue	OverDrive Checkouts	IA Loans <sup>2</sup>
	(dollars)	(units)	(units)
<b>(a)</b>	(b)	(c)	(d)
The Catcher in the Rye			3,451
The Mysterious Benedict Society			941
Blink: The Power of Thinking Without Thinking			693
The Witness			669
Best Kept Secrets			583
Middle School, the Worst Years of My Life			570
The Winds of War			567
The Caine Mutiny: A Novel of World War II			478
I Funny: A Middle School Story			477
What the Dog Saw			404
PS, I Love You			321
Tipping Point: How Little Things Can Make a Big Di			304
Franny and Zooey			256
Caliban's War			242
Leviathan Wakes			210
Who Could That Be at This Hour?			201
The Mysterious Benedict Society and the Perilous J			180
Raise High the Roof Beam, Carpenters, and Seymour:			176
David and Goliath: Underdogs, Misfits, and the Art			172
Ship Breaker			170
Γhe Extraordinary Education of Nicholas Benedict			164
Nine Stories			146
When Did You See Her Last?			119
Invisible			99
All the President's Women: Donald Trump and the Ma			73
The Jury Master			67
Today Will Be Different			18
Total			11,751

**Notes:** <sup>1</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

Sources: INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; OverDrive Supp 002; Complaint, Exhibit A.

<sup>&</sup>lt;sup>2</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

#### OverDrive Revenue, OverDrive Checkouts and IA Loans by Hachette Title and Period Jan 2017 - Jun 2020

		$\mathbf{CDL}^1$			$NEL^1$	
	OverDrive	OverDrive	IA	OverDrive	OverDrive	IA
Title <sup>2</sup>	Revenue	Checkouts	Loans <sup>3</sup>	Revenue	Checkouts	Loans <sup>3</sup>
	(dollars)	(units)	(units)	(dollars)	(units)	(units)
(a)	(b)	(c)	(d)	(e)	(f)	(g)
The Catcher in the Rye	\$		827	\$		2,589
The Mysterious Benedict Society			460			476
Blink: The Power of Thinking Without Thinking			370			323
The Witness			550			78
Best Kept Secrets			504			79
Middle School, the Worst Years of My Life			239			326
The Winds of War			454			95
The Caine Mutiny: A Novel of World War II			345			72
I Funny: A Middle School Story			121			207
What the Dog Saw			311			88
PS, I Love You			254			63
Tipping Point: How Little Things Can Make a Big Di			179			122
Franny and Zooey			120			135
Caliban's War			133			108
Leviathan Wakes			50			157
Who Could That Be at This Hour?			129			59
The Mysterious Benedict Society and the Perilous J			120			59
Raise High the Roof Beam, Carpenters, and Seymour:			125			51
David and Goliath: Underdogs, Misfits, and the Art			131			41
Ship Breaker			122			47
The Extraordinary Education of Nicholas Benedict			102			52
Nine Stories			24			121
When Did You See Her Last?			62			55
Invisible			75			21
All the President's Women: Donald Trump and the Ma			20			52
The Jury Master			55			12
Today Will Be Different			4			14
Total	\$		5,885	\$		5,506

Notes: <sup>1</sup> CDL refers to the period from January 2017 to March 23, 2020 (the day before NEL launch). NEL refers to the period from March 24, 2020 to June 16, 2020. March and June data are prorated using the number of days according to the definitions of the CDL and NEL periods.

Sources: INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; OverDrive\_Supp\_002; Complaint, Exhibit A.

<sup>&</sup>lt;sup>2</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

<sup>&</sup>lt;sup>3</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

# OverDrive Revenue, OverDrive Checkouts and IA Loans by HarperCollins Title Jan 2017 - Aug 2020

Title <sup>1</sup>	OverDrive Revenue	OverDrive Checkouts	IA Loans <sup>2</sup>
(a)	(dollars) (b)	(units) (c)	(units) (d)
(4)	(8)	(0)	(u)
The Lion, the Witch, and the Wardrobe	\$		5,712
The Bell Jar			1,574
Their Eyes Were Watching God			1,508
Little House in the Big Woods			1,495
Big Nate: Genius Mode			1,483
The Intelligent Investor			1,287
Big Nate: Mr. Popularity			1,260
The One and Only Ivan			1,249
Big Nate Goes for Broke			1,063
The Magician's Nephew			1,047
Little House on the Prairie			1,010
The Chocolate Touch			945
Farmer Boy			837
Simon vs. the Homo Sapiens Agenda			589
The Miseducation of Cameron Post			295
Fancy Nancy: Too Many Tutus			216
Red: A Crayon's Story			142
Night Watch			85
The Bride Wore Size 12			72
Extraordinary Means			69
Fancy Nancy: Super Secret Surprise Party			68
Commonwealth			63
A Dangerous Place			61
Elegy for Eddie			60
Foul Play			52
Judgment Call			48
Dance of the Bones			43
Journey to Munich			38
World Gone By			32
Resist			25
Defiance			21
Breathe			16
The Return of George Washington			10
Total	<u> </u>		22,475

**Notes:** <sup>1</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

**Sources:** INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; OverDrive Supp 002; Complaint, Exhibit A.

<sup>&</sup>lt;sup>2</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

## OverDrive Revenue, OverDrive Checkouts and IA Loans by HarperCollins Title and Period Jan 2017 - Jun 2020

		$CDL^1$			$NEL^1$	
	OverDrive	OverDrive	IA	OverDrive	OverDrive	IA
Title <sup>2</sup>	Revenue	Checkouts	Loans <sup>3</sup>	Revenue	Checkouts	Loans <sup>3</sup>
	(dollars)	(units)	(units)	(dollars)	(units)	(units)
(a)	(b)	(c)	(d)	(e)	<b>(f)</b>	(g)
The Lion, the Witch, and the Wardrobe	\$		2,020	\$		3,240
The Bell Jar			939			627
Their Eyes Were Watching God			899			546
Little House in the Big Woods			706			716
Big Nate: Genius Mode			247			1,223
The Intelligent Investor			335			877
Big Nate: Mr. Popularity			258			995
The One and Only Ivan			114			1,125
Big Nate Goes for Broke			240			711
The Magician's Nephew			586			398
Little House on the Prairie			471			481
The Chocolate Touch			391			549
Farmer Boy			568			266
Simon vs. the Homo Sapiens Agenda			103			479
The Miseducation of Cameron Post			139			155
Fancy Nancy: Too Many Tutus			79			136
Red: A Crayon's Story			36			103
Night Watch			35			48
The Bride Wore Size 12			54			18
Extraordinary Means			46			23
Fancy Nancy: Super Secret Surprise Party			15			52
Commonwealth			14			35
A Dangerous Place			29			29
Elegy for Eddie			27			31
Foul Play			29			23
Judgment Call			35			9
Dance of the Bones			23			8
Journey to Munich			4			24
World Gone By			11			21
Resist			15			10
Defiance			16			5
Breathe			3			13
The Return of George Washington			3			6
Total			8,495	\$		12,981
10(2)	\$		0,493	Φ		12,901

Notes: <sup>1</sup> CDL refers to the period from January 2017 to March 23, 2020 (the day before NEL launch). NEL refers to the period from March 24, 2020 to June 16, 2020. March and June data are prorated using the number of days according to the definitions of the CDL and NEL periods.

Sources: INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; OverDrive\_Supp\_002; Complaint, Exhibit A.

<sup>&</sup>lt;sup>2</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

<sup>&</sup>lt;sup>3</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

## OverDrive Revenue, OverDrive Checkouts and IA Loans by Penguin Random House Title Jan 2017 - Aug 2020

Title <sup>1</sup>	OverDrive Revenue	OverDrive Checkouts	IA Loans²
	(dollars)	(units)	(units)
(a)	(b)	(c)	(d)
Lord of the Flies	\$		3,278
The Bluest Eye			1,821
Into the Wild			1,297
The House on Mango Street			1,147
Fallen			1,056
The Road			985
A Short History of Nearly Everything			975
Eat, Pray, Love: One Woman's Search for Everything			793
Gone Girl			777
Song of Solomon			757
The Body Keeps the Score: Brain, Mind, and Body in			641
The Night Circus			617
The Innocent Man: Murder and Injustice in a Small			564
If I Stay			561
A Dance with Dragons			482
Station Eleven			476
Theodore Boone: Kid Lawyer			419
The Man Who Solved the Market			362
Hondo			309
Escape from Mr. Lemoncello's Library			298
Junie B., First Grader: Boss of Lunch			287
Phantom Prey			283
When Breath Becomes Air			260
An Ember in the Ashes			260
Theodore Boone: The Accused			235
Legend			231
The Better Angels of Our Nature: Why Violence has			213
Fear Nothing			191
Scat			175
My Life Next Door			153
Daring Greatly: How the Courage to Be Vulnerable T			138
Three Times Lucky			120
Dead Wake: the Last Crossing of the Lusitania			109
Lilac Girls			87
Who was Jackie Robinson?			84
Lab Girl			73
Redeployment			70
Give and Take: a Revolutionary Approach to Success			67
A Brief History of Seven Killings			57
Neurotribes: the Legacy of Autism and the Future o			55
Who is Bill Gates?			49
The Sports Gene: Inside the Science of Extraordina			48
The Burgess Boys			34
Thanks for the Feedback: the Science and Art of Re			32
Golden Son			32
How I Discovered Poetry			12
Open Heart			9
A Short History of Nearly Everything: Special Illu			-
Total	- \$		20,979
1 otal	φ		40,579

Notes: <sup>1</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

Sources: INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; OverDrive\_Supp\_002; Complaint, Exhibit A.

<sup>&</sup>lt;sup>2</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

#### OverDrive Revenue, OverDrive Checkouts and IA Loans by Penguin Random House Title and Period Jan 2017 - Jun 2020

		$\mathbf{CDL}^1$			$NEL^1$	
	OverDrive	OverDrive	IA	OverDrive	OverDrive	IA
Title <sup>2</sup>	Revenue	Checkouts	Loans <sup>3</sup>	Revenue	Checkouts	Loans
	(dollars)	(units)	(units)	(dollars)	(units)	(units)
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Lord of the Flies	\$		1,237	\$		2,01
Γhe Bluest Eye			611			73
Into the Wild			582			70
Γhe House on Mango Street			545			59
Fallen			605			38
The Road			547			42
A Short History of Nearly Everything			646			3
at, Pray, Love: One Woman's Search for Everything			515			2.
Gone Girl			284			4:
ong of Solomon			369			3
The Body Keeps the Score: Brain, Mind, and Body in			112			52
he Night Circus			314			2
he Innocent Man: Murder and Injustice in a Small			387			1.
f I Stay			327			2
A Dance with Dragons			172			13
tation Eleven			209			2
heodore Boone: Kid Lawyer			262			1
he Man Who Solved the Market			62			2
Iondo			150			1
scape from Mr Lemoncello's Library			28			2
unie B , First Grader: Boss of Lunch			167			1
hantom Prey			235			
When Breath Becomes Air			115			1.
an Ember in the Ashes			104			1:
Theodore Boone: The Accused			151			
egend			190			
he Better Angels of Our Nature: Why Violence has			119			
ear Nothing			85			
cat			68			1
My Life Next Door			24			1:
Paring Greatly: How the Courage to Be Vulnerable T			62			
hree Times Lucky			38			
Dead Wake: the Last Crossing of the Lusitania			59			
ilac Girls			17			
Vho was Jackie Robinson?			21			
ab Girl			20			
tedeployment			51			
Give and Take: a Revolutionary Approach to Success			45			
Brief History of Seven Killings			21			
Jeurotribes: the Legacy of Autism and the Future o			26			
Vho is Bill Gates?			7			
he Sports Gene: Inside the Science of Extraordina			19			
The Burgess Boys			28			
hanks for the Feedback: the Science and Art of Re			16			
Golden Son			-			
Iow I Discovered Poetry			3			
Open Heart			5			
A Short History of Nearly Everything: Special Illu			3			
a short instory of inearry everything, special fill			-			

Footnotes on Next Page

Case 1:20-cv-04160-JGK-OTW Document 108-1 Filed 07/07/22 Page 35 of 48
Highly Confidential Expert Report of Rasmus Jørgensen, Ph.D.

Attorneys' Eyes Only

Exhibit 8b

Notes: <sup>1</sup> CDL refers to the period from January 2017 to March 23, 2020 (the day before NEL launch). NEL refers to the period from March 24, 2020 to June 16, 2020. March and June data are prorated using the number of days according to the definitions of the CDL and NEL periods.

- <sup>2</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.
- <sup>3</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

Sources: INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; OverDrive\_Supp\_002; Complaint, Exhibit A.

# OverDrive Revenue, OverDrive Checkouts and IA Loans by Wiley Title Jan 2017 - Aug 2020

Title <sup>1</sup>	OverDrive Revenue	OverDrive Checkouts	IA Loans <sup>2</sup>
(a)	(dollars) (b)	(units) (c)	(units) (d)
The Five Dysfunctions of a Team: a Leadership Fabl	\$		319
Let Your Life Speak: Listening for the Voice of Vo			267
Falling Upward: a Spirituality for the Two Halves			251
The Energy Bus			171
Oil Painting for Dummies			144
Basic Physics			131
Enough About You, Let's Talk About Me: How to Reco			120
Spanish All-in-One for Dummies			97
The Book Whisperer			80
Comparative Religion for Dummies			76
Overcoming the Five Dysfunctions of a Team			68
Ages and Stages: a Parent's Guide to Normal Childh			51
Getting Naked: a Business Fable About Shedding the			48
The Three Signs of a Miserable Job: a Fable for Ma			30
The Only Three Questions that Still Count: Investi			29
Wind Power for Dummies			26
The Advantage: Why Organizational Health Trumps Ev			25
Commercial Real Estate Investing for Dummies			10
Making Thinking Visible: How to Promote Engagement			2
Total	\$		1,945

**Notes:** <sup>1</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

**Sources:** INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; OverDrive Supp 002; Complaint, Exhibit A.

<sup>&</sup>lt;sup>2</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

#### OverDrive Revenue, OverDrive Checkouts and IA Loans by Wiley Title and Period Jan 2017 - Jun 2020

	CDL <sup>1</sup> NEL <sup>1</sup>					
Title <sup>2</sup>	OverDrive Revenue	OverDrive Checkouts	IA	OverDrive Revenue	OverDrive Checkouts	IA Loans <sup>3</sup>
	(dollars)	(units)	(units)	(dollars)	(units)	(units)
(a)	<b>(b)</b>	(c)	(d)	(e)	<b>(f)</b>	(g)
The Five Dysfunctions of a Team: a Leadership Fabl	\$		229	\$		84
Let Your Life Speak: Listening for the Voice of Vo			206			61
Falling Upward: a Spirituality for the Two Halves			197			54
The Energy Bus			92			78
Oil Painting for Dummies			112			31
Basic Physics			112			19
Enough About You, Let's Talk About Me: How to Reco			103			16
Spanish All-in-One for Dummies			59			37
The Book Whisperer			49			28
Comparative Religion for Dummies			53			22
Overcoming the Five Dysfunctions of a Team			47			21
Ages and Stages: a Parent's Guide to Normal Childh			30			21
Getting Naked: a Business Fable About Shedding the			39			9
The Three Signs of a Miserable Job: a Fable for Ma			26			4
The Only Three Questions that Still Count: Investi			23			5
Wind Power for Dummies			24			2
The Advantage: Why Organizational Health Trumps Ev			5			20
Commercial Real Estate Investing for Dummies			4			6
Making Thinking Visible: How to Promote Engagement			-			2
Total	\$		1,411	\$		521

Notes: 1 CDL refers to the period from January 2017 to March 23, 2020 (the day before NEL launch). NEL refers to the period from March 24, 2020 to June 16, 2020. March and June data are prorated using the number of days according to the definitions of the CDL and NEL periods.

INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; Sources: OverDrive Supp 002; Complaint, Exhibit A.

<sup>&</sup>lt;sup>2</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

<sup>&</sup>lt;sup>3</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

Peak IA Loans and Concurrent OverDrive Checkouts by Hachette Title Mar 2020 - Jun 2020

(a)		( •4 )	Checkouts <sup>3</sup>	Ratio
	(b)	(units) (c)	(units) (d)	(percent) (e) (c) / (d)
The Catcher in the Rye	April	1,296		%
Blink: The Power of Thinking Without Thinking	April	259		
The Mysterious Benedict Society	April	238		
Middle School, the Worst Years of My Life	April	159		
Tipping Point: How Little Things Can Make a Big Di	April	88		
Leviathan Wakes	April	86		
I Funny: A Middle School Story	May	84		
Franny and Zooey	April	68		
Caliban's War	April	67		
Nine Stories	April	65		
What the Dog Saw	April	56		
The Winds of War	April	41		
Best Kept Secrets	May	41		
The Witness	May	35		
All the President's Women: Donald Trump and the Ma	April	35		
The Mysterious Benedict Society and the Perilous J	April	34		
PS, I Love You	April	33		
Raise High the Roof Beam, Carpenters, and Seymour:	April	32		
When Did You See Her Last?	May	30		
The Caine Mutiny: A Novel of World War II	April	28		
David and Goliath: Underdogs, Misfits, and the Art	April	27		
Who Could That Be at This Hour?	April	26		
The Extraordinary Education of Nicholas Benedict	April	23		
Ship Breaker	April	22		
Invisible	April	9		
The Jury Master	May	7		
Today Will Be Different	April	6		

**Notes:** <sup>1</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

Sources: INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080-AEO; OverDrive\_Supp\_002; Complaint, Exhibit A.

<sup>&</sup>lt;sup>2</sup> Peak IA Loan is the number of IA loans in the month during NEL with the maximum number of IA loans.

<sup>&</sup>lt;sup>3</sup> Column includes the number of OverDrive Checkouts in the month during NEL in which IA loans peaked.

Peak IA Loans and Concurrent OverDrive Checkouts by HarperCollins Title
Mar 2020 - Jun 2020

Title <sup>1</sup>	Month of Peak  IA Loans	Peak  IA Loans <sup>2</sup>	OverDrive Checkouts <sup>3</sup>	Peak Ratio -(percent)-	
(a)			nits) (units) (c) (d)		
The Lion, the Witch, and the Wardrobe	April	1,510			
Big Nate: Genius Mode	April	617			
The One and Only Ivan	May	558			
Big Nate: Mr. Popularity	April	473			
The Intelligent Investor	April	457			
The Bell Jar	April	343			
Big Nate Goes for Broke	May	336			
Little House in the Big Woods	May	334			
The Chocolate Touch	April	310			
Simon vs. the Homo Sapiens Agenda	May	271			
Their Eyes Were Watching God	April	255			
Little House on the Prairie	April	237			
The Magician's Nephew	May	175			
Farmer Boy	April	130			
The Miseducation of Cameron Post	April	74			
Fancy Nancy: Too Many Tutus	April	65			
Red: A Crayon's Story	April	48			
Fancy Nancy: Super Secret Surprise Party	April	25			
Night Watch	May	24			
Elegy for Eddie	April	16			
Commonwealth	April	15			
Foul Play	May	14			
A Dangerous Place	May	13			
Extraordinary Means	April	13			
Journey to Munich	May	12			
World Gone By	April	11			
The Bride Wore Size 12	May	10			
Breathe	May	9			
Resist	May	5			
Dance of the Bones	May	4			
Judgment Call	April	4			
The Return of George Washington	April	3			
Defiance	May	3			

**Notes:** <sup>1</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

**Sources:** INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080-AEO; OverDrive Supp 002; Complaint, Exhibit A.

<sup>&</sup>lt;sup>2</sup> Peak IA Loan is the number of IA loans in the month during NEL with the maximum number of IA loans.

<sup>&</sup>lt;sup>3</sup> Column includes the number of OverDrive Checkouts in the month during NEL in which IA loans peaked.

#### Peak IA Loans and Concurrent OverDrive Checkouts by Penguin Random House Title Mar 2020 - Jun 2020

Title <sup>1</sup>	Month of Peak  IA Loans	Peak IA Loans <sup>2</sup>	OverDrive Checkouts <sup>3</sup>	Peak Ratio
(a)	(b)	(units) (c)	(units) (d)	(percent (e)
(a)	(b)	(c)	(u)	(c) / (d)
Lord of the Flies	April	1,697		
Into the Wild	April	458		
The House on Mango Street	May	314		
The Body Keeps the Score: Brain, Mind, and Body in	April	265		
The Road	April	251		
The Man Who Solved the Market	April	238		
Song of Solomon	April	228		
Station Eleven	April	221		
The Bluest Eye	May	203		
Gone Girl	April	175		
Fallen	April	152		
A Short History of Nearly Everything	April	152		
Escape from Mr. Lemoncello's Library	April	129		
Eat, Pray, Love: One Woman's Search for Everything	April	120		
The Night Circus	April	115		
If I Stay	April	114		
When Breath Becomes Air	April	100		
Theodore Boone: Kid Lawyer	April	85		
Hondo	April	78		
A Dance with Dragons	April	70		
My Life Next Door	April	64		
Γhe Innocent Man: Murder and Injustice in a Small	April	60		
Junie B., First Grader: Boss of Lunch	April	60		
An Ember in the Ashes	April	56		
Daring Greatly: How the Courage to Be Vulnerable T	April	51		
Scat	April	49		
Γhe Better Angels of Our Nature: Why Violence has	April	40		
Γheodore Boone: The Accused	April	39		
Three Times Lucky	April	39		
Lab Girl	April	38		
Who was Jackie Robinson?	May	32		
Dead Wake: the Last Crossing of the Lusitania	April	30		
Legend	April	30		
Phantom Prey	April	29		
Who is Bill Gates?	May	25		
Lilac Girls	April	21		
Fear Nothing	April	21		
A Brief History of Seven Killings	April	18		
Neurotribes: the Legacy of Autism and the Future o	May	17		
Golden Son	April	16		
The Sports Gene: Inside the Science of Extraordina	April	15		
Redeployment	April	13		
Thanks for the Feedback: the Science and Art of Re	April	11		
Give and Take: a Revolutionary Approach to Success	April	10		
How I Discovered Poetry	May	5		
The Burgess Boys		3		
Open Heart	May	2		
	April	۷		
A Short History of Nearly Everything: Special Illu  Average	<u> </u>			

Case 1:20-cv-04160-JGK-OTW Document 108-1 Filed 07/07/22 Page 41 of 48 Expert Report of Rasmus Jørgensen, Ph.D.

Highly Confidential Expert Report of Rasmus Jørgensen, Ph.D.

Attorneys' Eyes Only Exhibit 12

**Notes:** <sup>1</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

- <sup>2</sup> Peak IA Loan is the number of IA loans in the month during NEL with the maximum number of IA loans.
- <sup>3</sup> Column includes the number of OverDrive Checkouts in the month during NEL in which IA loans peaked.

Sources: INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080-AEO; OverDrive Supp 002; Complaint, Exhibit A.

#### Peak IA Loans and Concurrent OverDrive Checkouts by Wiley Title Mar 2020 - Jun 2020

Title <sup>1</sup>	Month of Peak IA Loans	Peak IA Loans <sup>2</sup>	OverDrive Checkouts <sup>3</sup>	Peak Ratio
(a)	(b)	(units) (c)	(units) (d)	(percent) (e) (c) / (d)
The Energy Bus	April	42		%
The Five Dysfunctions of a Team: a Leadership Fabl	April	41		
Let Your Life Speak: Listening for the Voice of Vo	April	32		
Falling Upward: a Spirituality for the Two Halves	April	30		
Spanish All-in-One for Dummies	April	17		
Oil Painting for Dummies	May	16		
Comparative Religion for Dummies	May	14		
Overcoming the Five Dysfunctions of a Team	April	14		
Enough About You, Let's Talk About Me: How to Reco	May	12		
Ages and Stages: a Parent's Guide to Normal Childh	May	12		
The Book Whisperer	April	11		
The Advantage: Why Organizational Health Trumps Ev	May	10		
Basic Physics	May	9		
Getting Naked: a Business Fable About Shedding the	May	5		
The Only Three Questions that Still Count: Investi	May	4		
Commercial Real Estate Investing for Dummies	April	3		
The Three Signs of a Miserable Job: a Fable for Ma	April	2		
Wind Power for Dummies	May	2		
Making Thinking Visible: How to Promote Engagement	May	2		
Average		<u> </u>		%

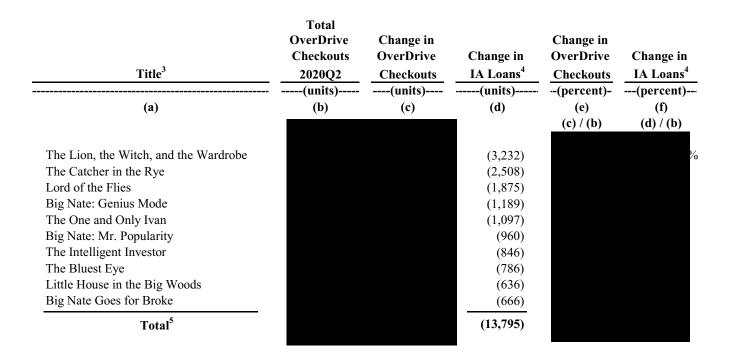
**Notes:** <sup>1</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.

Sources: INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080-AEO; OverDrive\_Supp\_002; Complaint, Exhibit A.

<sup>&</sup>lt;sup>2</sup> Peak IA Loan is the number of IA loans in the month during NEL with the maximum number of IA loans.

<sup>&</sup>lt;sup>3</sup> Column includes the number of OverDrive Checkouts in the month during NEL in which IA loans peaked.

## Change in OverDrive Checkouts and IA Loans<sup>1</sup> by 10 Most Popular Titles<sup>2</sup> 2020Q2 to 2020Q3



Notes: 1 Change is calculated as the difference between 2020Q3 and 2020Q2.

- <sup>2</sup> Most popular titles refers to titles with the most IA loans during NEL.
- <sup>3</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.
- <sup>4</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.
- <sup>5</sup> Total of the ten titles listed.

Sources: INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; OverDrive Supp 002; Complaint, Exhibit A.

Exhibit 15

#### Change in OverDrive Checkouts and IA Loans<sup>1</sup> by 10 Least Popular Titles<sup>2</sup> 2020Q2 to 2020Q3

Title <sup>3</sup> (a)	Total OverDrive Checkouts 2020Q2(units) (b)	Change in OverDrive Checkouts(units)	Change in IA Loans <sup>4</sup> (units) (d)	Change in OverDrive Checkouts (percent) (e)	Change in  IA Loans <sup>4</sup> (percent) (f)
()	(2)	(6)	()	(6)	(1)
Making Thinking Visible: How to Promote Engagement			(2)		V <sub>0</sub>
Wind Power for Dummies			(2)		
Open Heart			(4)		
The Three Signs of a Miserable Job: a Fable for Ma			(4)		
Defiance			(5)		
The Only Three Questions that Still Count: Investi			(6)		
The Return of George Washington			(4)		
The Burgess Boys			(4)		
Commercial Real Estate Investing for Dummies			(6)		
Dance of the Bones			5		
Total <sup>5</sup>			(32)		

Notes: 1 Change is calculated as the difference between 2020Q3 and 2020Q2.

- <sup>2</sup> Least popular titles refers to titles with the least IA loans during NEL.
- <sup>3</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources.
- 4 Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num loans', 'num history', and/or 'last loan date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.
- <sup>5</sup> Total of the ten titles listed.

INTARC00136118-284; INTARC00136286-494; INTARC00152100; INTARC00472080 - AEO; Sources: OverDrive\_Supp\_002; Complaint, Exhibit A.

## Change in Paperback Sales and IA Loans by Hachette Title<sup>1</sup> Barnes & Noble and Amazon Accounts 2020Q2 to 2020Q3

Title <sup>2</sup>	Paperback Units Sold 2020Q2(units)	Change in Paperback Sales(units)	Change in  IA Loans <sup>3</sup> (units)	Change in Paperback Sales (percent)-	Change in  IA Loans <sup>3</sup> (percent)
(a)	(b)	(c)	(d)	(e) (c) / (b)	(f) (d) / (b)
The Catcher in the Rye	33,090	(4,746)	(2,508)	(14) %	(8) %
Middle School, the Worst Years of My Life	7,967	(4,789)	(312)	(60)	(4)
Blink: The Power of Thinking Without Thinking	5,305	2,319	(270)	44	(5)
I Funny: A Middle School Story	1,673	(236)	(109)	(14)	(7)
Leviathan Wakes	6,647	(3,913)	(144)	(59)	(2)
Franny and Zooey	737	(459)	(129)	(62)	(18)
Nine Stories	511	(5)	(118)	(1)	(23)
Caliban's War	5,261	(2,755)	(103)	(52)	(2)
Tipping Point: How Little Things Can Make a Big Di	7,510	1,059	(102)	14	(1)
The Winds of War	1,526	(1,087)	(97)	(71)	(6)
The Caine Mutiny: A Novel of World War II	741	(642)	(45)	(87)	(6)
Best Kept Secrets	100	(78)	(75)	(78)	(75)
What the Dog Saw	1,716	(623)	(63)	(36)	(4)
PS, I Love You	452	(316)	(57)	(70)	(13)
The Mysterious Benedict Society and the Perilous J	10,958	(1,497)	(56)	(14)	(1)
The Extraordinary Education of Nicholas Benedict	8,249	(583)	(53)	(7)	(1)
Who Could That Be at This Hour?	469	275	(44)	59	(9)
When Did You See Her Last?	497	(332)	(50)	(67)	(10)
Raise High the Roof Beam, Carpenters, and Seymour:	20	16	(48)	80	(240)
Ship Breaker	997	(199)	(43)	(20)	(4)
David and Goliath: Underdogs, Misfits, and the Art	6,681	(621)	(30)	(9)	(0)
Invisible	1,982	(1,657)	(22)	(84)	(1)
Today Will Be Different	576	(530)	(13)	(92)	(2)
Total	103,665	(21,399)	(4,491)		

Notes: 1 Change is calculated as the difference between 2020Q3 and 2020Q2.

<sup>&</sup>lt;sup>2</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources. HACHETTE0002475 does not include "The Mysterious Benedict Society" and records zero paperback sales in Q2 2020 for the titles: "The Witness", "All The President's Women", and "The Jury Master". Thus these titles are omitted from this exhibit.

<sup>&</sup>lt;sup>3</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

# Change in Paperback Sales and IA Loans by Hachette Title<sup>1</sup> All Customer Accounts 2020Q2 to 2020Q3

Title <sup>2</sup>	Paperback Units Sold 2020Q2(units)	Change in Paperback Sales(units)	Change in  IA Loans <sup>3</sup> (units)	Change in Paperback Sales(percent)	Change in  IA Loans <sup>3</sup> (percent)
(a)	<b>(b)</b>	(c)	(d)	(e) (c) / (b)	(f) (d) / (b)
The Catcher in the Rye	44,888	(4,485)	(2,508)	(10) %	(6) %
Middle School, the Worst Years of My Life	11,329	(5,512)	(312)	(49)	(3)
Blink: The Power of Thinking Without Thinking	5,137	5,062	(270)	99	(5)
I Funny: A Middle School Story	3,260	(574)	(109)	(18)	(3)
Leviathan Wakes	8,689	(3,332)	(144)	(38)	(2)
Franny and Zooey	908	(295)	(129)	(32)	(14)
Nine Stories	670	84	(118)	13	(18)
Caliban's War	7,305	(2,886)	(103)	(40)	(1)
Tipping Point: How Little Things Can Make a Big Di	10,213	(1,136)	(102)	(11)	(1)
The Winds of War	1,683	(1,137)	(97)	(68)	(6)
The Caine Mutiny: A Novel of World War II	773	(614)	(45)	(79)	(6)
The Witness	(70)	132	(49)	-	-
Best Kept Secrets	103	(82)	(75)	(80)	(73)
What the Dog Saw	2,895	(2,357)	(63)	(81)	(2)
PS, I Love You	(1,282)	716	(57)	-	-
The Mysterious Benedict Society and the Perilous J	14,580	706	(56)	5	(0)
The Extraordinary Education of Nicholas Benedict	11,914	(584)	(53)	(5)	(0)
Who Could That Be at This Hour?	731	425	(44)	58	(6)
When Did You See Her Last?	806	(71)	(50)	(9)	(6)
Raise High the Roof Beam, Carpenters, and Seymour:	(11)	90	(48)	-	-
Ship Breaker	1,983	(17)	(43)	(1)	(2)
David and Goliath: Underdogs, Misfits, and the Art	8,281	539	(30)	7	(0)
Invisible	1,619	(1,543)	(22)	(95)	(1)
Today Will Be Different	681	(690)	(13)	(101)	(2)
Total	137,085	(17,561)	(4,540)		

Notes:  $\,^1$  Change is calculated as the difference between 2020Q3 and 2020Q2.

<sup>&</sup>lt;sup>2</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources. HACHETTE0002475 does not include "The Mysterious Benedict Society" and records zero sales in Q2 2020 for the titles: "All The President's Women", and "The Jury Master". Thus, these titles are omitted.

<sup>&</sup>lt;sup>3</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

### Change in Ebook Sales and IA Loans by Hachette Title<sup>1</sup> Barnes & Noble and Amazon Accounts 2020Q2 to 2020Q3

Title <sup>2</sup> (a)	Ebook Units Sold 2020Q2(units) (b)	Change in Ebook Sales(units) (c)	Change in  IA Loans <sup>3</sup> (units) (d)	Change in Ebook Sales(percent) (e) (c) / (b)	Change in  IA Loans <sup>3</sup> (percent)-  (f) (d) / (b)
The Catcher in the Rye	12,449	(5,707)	(2,508)	-46 %	-20 %
Middle School, the Worst Years of My Life	765	(289)	(312)	-38	-41
Blink: The Power of Thinking Without Thinking	2,232	(9)	(270)	0	-12
I Funny: A Middle School Story	297	(110)	(109)	-37	-37
Leviathan Wakes	7,687	(353)	(144)	-5	-2
Franny and Zooey	1,875	(1,168)	(129)	-62	-7
Nine Stories	669	(150)	(118)	-22	-18
Caliban's War	4,827	(800)	(103)	-17	-2
Tipping Point: How Little Things Can Make a Big Di	2,020	(339)	(102)	-17	-5
The Winds of War	1,237	(89)	(97)	-7	-8
The Caine Mutiny: A Novel of World War II	529	(31)	(45)	-6	-9
The Witness	629	328	(49)	52	-8
Best Kept Secrets	709	17	(75)	2	-11
What the Dog Saw	523	(54)	(63)	-10	-12
PS, I Love You	594	(334)	(57)	-56	-10
The Mysterious Benedict Society and the Perilous J	875	(255)	(56)	-29	-6
The Extraordinary Education of Nicholas Benedict	207	273	(53)	132	-26
Who Could That Be at This Hour?	141	(46)	(44)	-33	-31
When Did You See Her Last?	117	(19)	(50)	-16	-43
All the President's Women: Donald Trump and the Ma	841	(688)	(48)	-82	-6
Raise High the Roof Beam, Carpenters, and Seymour:	153	(14)	(48)	-9	-31
Ship Breaker	274	(66)	(43)	-24	-16
David and Goliath: Underdogs, Misfits, and the Art	1,921	100	(30)	5	-2
Invisible	5,938	(4,049)	(22)	-68	0
Today Will Be Different	359	(141)	(13)	-39	-4
The Jury Master	2,136	(537)	(10)	-25	0
Total	50,004	(14,530)	(4,598)	<del></del>	

Notes: <sup>1</sup> Change is calculated as the difference between 2020Q3 and 2020Q2.

<sup>&</sup>lt;sup>2</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources. HACHETTE0002475 does not include "The Mysterious Benedict Society".

<sup>&</sup>lt;sup>3</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.

Case 1:20-cv-04160-JGK-OTW Document 108-1 Filed 07/07/22 Page 48 of 48
Highly Confidential
Attorneys' Eyes Only

Exhibit 17b

### Change in Ebook Sales and IA Loans by Hachette Title<sup>1</sup> All Customer Accounts 2020Q2 to 2020Q3

Title <sup>2</sup> (a)	Ebook Units Sold 2020Q2(units) (b)	Change in Ebook Sales(units) (c)	Change in  IA Loans <sup>3</sup> (units) (d)	Change in Ebook Sales(percent) (e) (c) / (b)	Change in  IA Loans <sup>3</sup> (percent)-  (f) (d) / (b)
The Catcher in the Rye	14,135	(6,544)	(2,508)	-46 %	-18 %
Middle School, the Worst Years of My Life	960	(378)	(312)	-39	-33
Blink: The Power of Thinking Without Thinking	2,734	6	(270)	0	-10
I Funny: A Middle School Story	369	(144)	(109)	-39	-30
Leviathan Wakes	8,468	(446)	(144)	-5	-2
Franny and Zooey	2,054	(1,284)	(129)	-63	-6
Nine Stories	704	(149)	(118)	-21	-17
Caliban's War	5,320	(869)	(103)	-16	-2
Tipping Point: How Little Things Can Make a Big Di	2,800	(460)	(102)	-16	-4
The Winds of War	1,318	(115)	(97)	-9	-7
The Caine Mutiny: A Novel of World War II	562	(35)	(45)	-6	-8
The Witness	753	288	(49)	38	-7
Best Kept Secrets	928	52	(75)	6	-8
What the Dog Saw	624	(83)	(63)	-13	-10
PS, I Love You	662	(373)	(57)	-56	-9
The Mysterious Benedict Society and the Perilous J	1,037	(315)	(56)	-30	-5
The Extraordinary Education of Nicholas Benedict	273	279	(53)	102	-19
Who Could That Be at This Hour?	165	(53)	(44)	-32	-27
When Did You See Her Last?	139	(30)	(50)	-22	-36
All the President's Women: Donald Trump and the Ma	982	(791)	(48)	-81	-5
Raise High the Roof Beam, Carpenters, and Seymour:	166	(18)	(48)	-11	-29
Ship Breaker	346	(102)	(43)	-29	-12
David and Goliath: Underdogs, Misfits, and the Art	2,146	180	(30)	8	-1
Invisible	6,637	(4,614)	(22)	-70	0
Today Will Be Different	404	(153)	(13)	-38	-3
The Jury Master	2,572	(525)	(10)	-20	0
Total	57,258	(16,676)	(4,598)		

Notes: <sup>1</sup> Change is calculated as the difference between 2020Q3 and 2020Q2.

<sup>&</sup>lt;sup>2</sup> Titles are referenced from Exhibit A of the Complaint to harmonize titles across distinct title identifiers in the various data sources. HACHETTE0002475 does not include "The Mysterious Benedict Society".

<sup>&</sup>lt;sup>3</sup> Internet Archive Loans include 14-day loans identified in IA's Catalog Histories before June 1, 2020, using the 'num\_loans', 'num\_history', and/or 'last\_loan\_date' data fields. See Cheng Declaration, ¶¶ 5-7. From June 1, 2020, and onwards, Internet Archive Loans include 1-hour and 14-day loans identified from the Loan Analytics Database. See Cheng Declaration, ¶¶ 5, 39.